

- Traffic and revenue assumptions
- Anticipated toll rates and duration of toll collection
- Operating and maintenance strategies and costs
- Capital costs
- Implementation or phasing options
- Need for supplemental, non-toll revenue sources
- Project debt structures
- Identification and assessment of the Finance Plan risks and risk mitigation strategies
- Refinement of the Finance Plan outputs to facilitate evaluation of alternatives and selection of preferred strategy

Several alternative project phasing and implementation plans were developed to identify the strategy that best meets NCDOT's project goals. Initial plans tested determined that development of a set of projects that would reconstruct the entire corridor simultaneously was not feasible from a finance standpoint and would most likely not be implementable due to the very large volume of construction resources required to accomplish this effort.

Therefore, corridor needs were examined to determine appropriate sequencing and timing of improvements. The phasing and implementation plan presented in this document includes an initial project to meet immediate capacity and/or pavement and bridge reconstruction needs, followed by a series of subsequent projects, to bring the corridor to its ultimate configuration. It is intended that the initial project would be bond funded with corridor revenues sufficient to finance all or the majority of the project costs. The subsequent projects would then be funded using toll equity or excess toll revenues on a "pay as you go" basis.

### **2.5.1 Phasing Approach**

The phasing plan for I-95 uses the traffic model as the primary tool to forecast tolled traffic and revenue upon the application of tolls to I-95. The traffic model allows sensitivity testing within the corridor to evaluate changes in the toll plan, toll rates, inflation factors, and the scheduling of improvements. This modeling process included the development of a 2040 model to forecast non-tolled traffic. It included the entire I-95 corridor, US 301, all roadways crossing I-95 and the major potential diversion routes. The annual growth within the I-95 corridor is typically within the range of 1-2 percent, with the highest growth in the Fayetteville area of approximately 3.5 percent per year.

An initial project was identified that would provide for the most critical capacity improvements within the entire I-95 corridor in North Carolina. This project area extends from south of the Fayetteville area, near mile marker (MM) 20 to I-40 at MM 81, a distance of 61 miles. This is the portion of the corridor with the highest level of existing traffic and the highest projected growth in traffic. The ability of this first project phase to generate toll revenue was tested at several different toll rates. Included in this series of tests were the impacts of tolling the remainder of the corridor at a lower toll rate to generate additional revenue to allow the least additional funding from other sources and the ability to fund the subsequent improvements when needed. The initial improvement project is denoted as Phase 1 and the subsequent